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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/687,020	10/13/2000	Eric C. Coad	55202USA1A.002	9163	
75	590 04/30/2002				
Attention: Scott R. Pribnow			EXAMINER		
Office of Intellectual Property Counsel 3M Innovative Properties Company P. O. Box 33427 St. Paul, MN 55133-3427			SHAKER	I, HADI	
			ART UNIT	PAPER NUMBER	
			3723		
			DATE MAIL ED: 04/30/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati n N .	Applicant(s)			
Office Action Summary		09/687,020	COAD ET AL.	M		
		Examiner	Art Unit			
		Hadi Shakeri	3723			
Peri d f	The MAILING DATE of this communication r Reply	n appears n the cover sh et with the	correspondence add	ress		
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICATI sions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicatic period for reply specified above is less than thirty (30) days, period for reply is specified above, the maximum statutory pre to reply within the set or extended period for reply will, by eply received by the Office later than three months after the dipatent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a reply be tion. a reply within the statutory minimum of thirty (30) da beriod will apply and will expire SIX (6) MONTHS from statute, cause the application to become ABANDON	mely filed ys will be considered timely. the mailing date of this com	munication.		
1)⊠	Responsive to communication(s) filed on	29 March 2002 .				
2a)	This action is FINAL . 2b)	This action is non-final.				
3) Disp siti	Since this application is in condition for a closed in accordance with the practice ur on of Claims	llowance except for formal matters, p nder <i>Ex parte Quayle</i> , 1935 C.D. 11, 4	rosecution as to the 453 O.G. 213.	merits is		
4)🖂	Claim(s) 1-32 is/are pending in the applic	ation.				
	4a) Of the above claim(s) is/are with	ndrawn from consideration.				
5)	Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1-32</u> is/are rejected.		•			
7)	Claim(s) is/are objected to.					
	Claim(s) are subject to restriction a on Papers	nd/or election requirement.				
9) 🗌 7	he specification is objected to by the Exar	miner.				
	he drawing(s) filed on <u>13 October 2000</u> is/		by the Examiner			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
	If approved, corrected drawings are required		•			
12) 🔲 T	he oath or declaration is objected to by the	e Examiner.				
Pri rity u	nder 35 U.S.C. §§ 119 and 120					
13)□	Acknowledgment is made of a claim for for	reign priority under 35 U.S.C. § 119(a)-(d) or (f).			
	All b) Some * c) None of:	. , ,	, (=, =: (-).			
	1. Certified copies of the priority docum	nents have been received.	•			
		nents have been received in Application	on No.			
	B. Copies of the certified copies of the	priority documents have been receive		age		
* Se	application from the Internationa ee the attached detailed Office action for a	I Bureau (PCT Rule 17.2(a)). list of the certified copies not receive	d			
14)□ Ad	knowledgment is made of a claim for dom	nestic priority under 35 U.S.C. § 119(e	e) (to a provisional ap	oplication).		
	☐ The translation of the foreign language cknowledgment is made of a claim for dom	• •				
Attachment(
2) Notice 3) Inform	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No) 5) Notice of Informal F	(PTO-413) Paper No(s). Patent Application (PTO-1			
J.S. Patent and Tra PTO-326 (Rev.	· ·	e Acti n Summary	Part of Par	er No. 07		

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DETAILED ACTION

Drawings

1. The proposed drawing correction is not approved, since it would create objection to the specification, e.g., "brief description of the drawings", however the amended specification negates the drawing objection, for the machine direction is shown in Fig. 5.

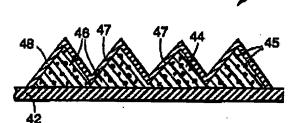
Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-18 and 19-31 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Martin et al., US Patent No. 5,707,409.

Martin et al. discloses all the limitations of the claims (incorporated US Patents, 5,201,916, 4,842,937 and 4,992,082).



Claim Rejections - 35 USC § 103

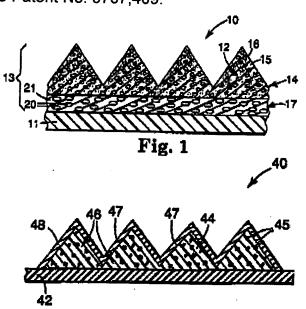
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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3. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoetzel, Patent No. 5,928,394 in view of Martin et al, US Patent No. 5707,409.

Stoetzel discloses all the limitations of claims 1 and 20, i.e., an abrasive article (10) comprising a backing (11) an abrasive coating consisting essentially of a harden binder comprising a plurality of precisely-shaped protrusions (14) (free of abrasives, col. 6, lines 14-17), except for disclosing the diamond-like carbon coating. Martin et al. teaches an abrasive article having a diamond like coating layer (48). It would have



been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the article of Stoetzel with diamond-like coating as taught by Martin et al. to improve cutting performance, depending on the workpiece parameters.

Regarding claims 2-19 and 21-32, prior art meets the limitations.

Response to Arguments

4. Applicant's arguments filed March 03, 2002 have been fully considered but they are not persuasive. The assertion that consisting "essentially" means to exclude the abrasives is not persuasive because Examiner differentiates between "consisting of" and "consisting essentially of" and further in view of claims 19 and 32. However since claims 19 and 32 were rejected in error (Martin et al., col. 5, line 1) this action is not made final.

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Conclusion

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hadi Shakeri at (703) 308-6279, FAX (703) 746-3279 for unofficial documents. The examiner can normally be reached on Monday-Thursday, 7:30 AM to 6:00 PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1148.

Joseph J. Hail, III Supervisory Patent Examiner Technology Center 3700 Page 4

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April 23, 2002